## **ABSTRACT OF THE DISCLOSURE**

The invention provides a separating vessel (10) suitable for use in the treatment of a mineral sample wherein a molten slag (11) is separated from a molten collector material (12) comprising a container defining an interior cavity (13) for receiving the molten materials (11,12), an outlet aperture (14) leading from the interior cavity to the exterior of the container, and a separating surface (15) associated with the outlet aperture (14) which is shaped to cause droplets of flux (11a) to be carried along such surface, while droplets of collector material (12a) drip off such surface by the force of gravity.